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Smith et al.(10) **Pub. No.: US 2014/0098183 A1**(43) **Pub. Date: Apr. 10, 2014**(54) **CONTROLLED THREE-DIMENSIONAL
COMMUNICATION ENDPOINT**(52) **U.S. Cl.**USPC **348/14.16; 348/E07.083; 348/E13.074**(71) Applicant: **MICROSOFT CORPORATION,**
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ABSTRACT(72) Inventors: **Yancey Christopher Smith,** Kirkland,
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A controlled three-dimensional (3D) communication endpoint system and method for simulating an in-person communication between participants in an online meeting or conference and providing easy scaling of a virtual environment when additional participants join. This gives the participants the illusion that the other participants are in the same room and sitting around the same table with the viewer. The controlled communication endpoint includes a plurality of camera pods that capture video of a participant from 360 degrees around the participant. The controlled communication endpoint also includes a display device configuration containing display devices placed at least 180 degrees around the participant and display the virtual environment containing geometric proxies of the other participants. Placing the participants at a round virtual table and increasing the diameter of the virtual table as additional participants are added easily achieves scalability.

